

# Department of Physician Assistant Education Master of Science in Medicine 5 units

#### **MSM 6500 INTERNAL MEDICINE**

Course director: Amy Vu	Term: varies
Phone 619-742-7952	Meeting day & time: varies
Email AVu@pointloma.edu	Meeting location: varies

#### **COURSE DESCRIPTION**

This is a 5-week, full time clinical practicum that focuses on the evaluation, diagnosis, and management of acute and chronic medical conditions in adults and elders. Students will perform complete history and physical exams, assist with consultations, evaluate and manage patients from admission to discharge when possible. Students will demonstrate how to order and interpret diagnostic tests commonly utilized in internal medicine and to perform clinical hospital procedures. Emphasis will be placed on inpatient/outpatient care including hospital documentation to include the admission summary, history and physical examination, daily progress note, consultation note, and discharge summary. Students will be expected to mirror the Preceptor's schedule and may be assigned to any shift on any day of the week, including holidays.

## **COURSE GOALS**

Within this five-week rotation, the supervised students will:

- 1. Have the opportunity to expand upon their didactic knowledge of medical conditions that appear across the life span both acutely and chronically in an internal medicine setting.
- 2. Learn to synthesize the didactic knowledge and skills gained into clinical applications in situations presented during the rotation.
- 3. Be provided ongoing opportunities to use the skills they have obtained in the evaluation of medical literature, and its use in evidence-based medicine and research.
- 4. Have the opportunity to increase their differential diagnoses.
- 5. Increase their ability to recommend, select and interpret appropriate diagnostic studies.
- 6. Gain proficiency in the diagnosis and management of conditions commonly encountered in internal medicine.
- 7. Have the opportunity to interact with a diverse population of patients and a variety of disorders involving all organ systems commonly encountered in the inpatient setting.

#### PROGRAM LEARNING OUTCOMES

## The content in this course will contribute to the student's proficiency in this/these area(s):

- 1. Gather a history and perform a physical examination. MK, IC, PC, PR, PB, SB
- 2. Prioritize a differential diagnosis following a clinical encounter. MK, IC, PC, PB
- 3. Recommend and interpret common diagnostic and screening tests.  $^{MK, \, IC, \, PC, \, PR, \, PB, \, SB}$
- 4. Enter and discuss orders and prescriptions. MK, IC, PC, PR, PB, SB
- 5. Document a clinical encounter in the patient record. MK, IC, PC, PR
- 6. Provide an oral presentation of a clinical encounter. MK, IC, PC, PR
- 7. Form clinical questions and retrieve evidence to advance patient care. MK, IC, PC, PR, PB, SB
- 8. Give or receive a patient handover to transition care responsibilities. MK, IC, PC, PR, PB, SB
- 9. Collaborate as a member of an inter-professional team. MK, IC, PC, PR, PB, SB
- 10. Recognize a patient requiring urgent or emergent care and initiate evaluation and management. MK, IC, PC, PR
- 11. Obtain informed consent for tests and/or procedures.  $^{MK, IC, PC, PR, PB}$
- 12. Perform the general procedures of a physician assistant. MK, IC, PC, PR, PB, SB
- 13. Identify system failures and contribute to a culture of safety and improvement. MK, IC, PR, PB, SB

Initials indicate PA core competency required to meet the PLO.

PA Core Competencies:

MK = Medical Knowledge IC = Interpersonal Skills & Communication PC = Patient Care

PR = Professionalism PB = Practice-based Learning SB = Systems-based Practice

## **COURSE LEARNING OUTCOMES**

Successful completion of this course requires demonstration of the skills and knowledge outlined here at, minimally, the COMPETENT level:

- 1. Obtain a history and perform a focused physical examination relevant to an adult or elderly patient condition. Application PLO1
- 2. Prioritize a differential diagnosis based on the history and physical findings in an adult and elderly patient. Analysis PLO2
- 3. Recommend and enter common diagnostic and screening tests, pharmacotherapeutics, and management based on their applicability to the differential diagnosis of a patient with an emergent condition. Synthesis PLO3,4
- 4. Document a clinical encounter including history, physical examination, lab and/or imaging results and a differential diagnosis in the patient record of an adult and elderly patient. Application PLOS
- 5. Provide an oral presentation of a clinical encounter for an adult and elderly patient including discussion of the pathology, laboratory and/or imaging results and justification of the proposed management plan. Synthesis PLO6,8,9
- 6. Form clinical questions and retrieve evidence to advance patient care in adult and elderly patient encounters. Evaluate PLO7,13
- 7. Recognize an adult or elderly patient requiring urgent or emergent care and initiate evaluation and management. Application PLO10

## **INSTRUCTIONAL OBJECTIVES**

The following are the required learning objectives for the Internal Medicine rotation. Students are responsible for meeting these objectives whether or not clinical examples are seen during the rotation experience. At the conclusion of the rotation, it is expected that the student will be able to do the following:

**Alignment to Core Competencies and Program Learning Outcomes** 

Core Competencies	Specific Learning Objectives	Connected LOs
Medical Knowledge	<ul> <li>Fund of medical knowledge regarding common medical problems sufficient for patient care</li> <li>Order and interpret laboratory, diagnostic and screening studies commonly used in adult medicine.</li> <li>Develop an appropriate differential diagnosis for common acute and chronic medical conditions</li> <li>Develop an appropriate treatment/management plan for an adult patient</li> <li>Recommend prevention strategies for common acute and chronic conditions</li> <li>Incorporates test characteristics, predictive values, and likelihood ratios into clinical decision-making.</li> <li>Implement a treatment/ management plan for an elderly patient with attention to polypharmacy.</li> </ul>	PLO:1,2,3,7,10 CLO:
Patient Care	<ul> <li>Gather and record complete and accurate histories on adult and elderly patients.</li> <li>Perform and record a comprehensive or focused physical exam on an adult or elder patient relevant to the chief complaint.</li> <li>Generate differential diagnoses based on the history, the physical examination, results of any diagnostic studies performed, and clinical knowledge of common adult and elder disorders as listed in the topic list below</li> <li>Formulate treatment plans for common acute and chronic medical problems.</li> <li>Differentiate between the patient requiring urgent care and an emergent condition and initiate management as appropriate.</li> <li>Demonstrate procedural skills as appropriate for the adult and geriatric clinical setting</li> </ul>	1,2,3,4,5,6,8, 10, 12

Practice-Based Learning and Improvement	<ul> <li>Obtain, analyze, and use the medical literature and other information resources to address medical questions and to sustain professional growth</li> <li>Identify individual learning goals, self-assess knowledge and behaviors.</li> </ul>	2,3,4,6,7,8
Interpersonal and Communication Skills	<ul> <li>Presents cases accurately reflecting chronology, details of physical findings, differential diagnoses, lab or imaging results and proposed treatment plan</li> <li>Written documentation is clear, concise, accurate and organized.</li> <li>Communicate effectively with patients, families and other care givers.</li> <li>Educate patients and families regarding common acute and chronic medical conditions.</li> <li>Check for patient's understanding of follow-up plan, including treatments, testing, referrals, and continuity of care.</li> </ul>	1,4,5,6,8,9, 11
System Based Practice	<ul> <li>Contribute to a culture of safety and improvement by identifying actual or potential system failures and notify the responsible person.</li> <li>Identify proper referral strategies for patients to other services for clinical interventions as appropriate.</li> </ul>	13
Professionalism	<ul> <li>Works well with team assuming responsibility when appropriate.</li> <li>Demonstrate respect, honesty, integrity and adherence to ethical behavior and legal standards</li> <li>Punctual for all scheduled events meeting all deadlines; dependable and communicates promptly when delayed</li> </ul>	1,5,6,8,9

# **Alignment of Organ System Based Conditions**

For the following conditions the student must define the etiology, identify the signs and symptoms, generate appropriate differential diagnoses, recommend a diagnostic work up, recognize risk factors and recommend prevention strategies, treatment and provide patient education as appropriate. Students are responsible for this knowledge whether or not clinical examples are seen during the rotation experience.

Organ	Symptoms	Conditions
Cardiovascular	Chest pain	Angina pectoris
	SOB	Cardiac arrhythmias /conduction disorders
	Palpitations	Cardiomyopathy
	Syncope	Congestive heart failure

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	Fever	Coronary vascular disease
	Claudication	Endocarditis
	Dyspnea on	Hyperlipidemia
	exertion	Heart murmurs
		Hypertension
		Myocardial infarction
		Myocarditis
		, Pericarditis
		Peripheral vascular disease,
		Rheumatic fever
		Rheumatic heart disease, Valvular heart disease
		Vascular disease
	COD	
	SOB	Acute/chronic bronchitis
Pulmonary	Chest pain	Asthma
	Hemoptysis	Carcinoid tumor
	Fever	Bronchiectasis
	Weight loss	COPD
	Cough	Cor pulmonale
		Hypoventilation syndrome
		Idiopathic pulmonary fibrosis
		Pneumoconiosis,
		Pneumonia (viral, bacterial, fungal, HIV-related)
		Pulmonary hypertension
		Pulmonary neoplasm
		Sarcoidosis
		Solitary pulmonary nodule
		Acute and chronic hepatitis
Gastrointestinal	Abdominal pain	Acute/chronic pancreatitis
Nutritional	Diarrhea	Anal fissure/fistula, Hemorrhoid
Nutritional		Cancer of rectum, colon, esophagus, stomach,
	Constipation	Cholangitis
	Melena	Cholecystitis
	Hematemesis	1
	Hematochezia	Cholelithiasis
	Nausea/vomiting	Cirrhosis
	Jaundice	Crohn disease
	Heartburn	Diverticular disease
	Anorexia	Esophageal strictures
	Change in bowel	Esophageal varices
	habits	Gastritis
		Gastroenteritis
		GERD
		Hepatic cancer
		Hiatal hernia
		Irritable Bowel disease
		Mallory-Weiss tear
		Peptic ulcer disease
		Ulcerative colitis

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Urology/Renal	Hematuria	Acid/Base disturbances
	Dysuria	Acute and chronic renal failure
	Abdominal pain	Acute interstitial nephritis
	Enlarged prostate	Benign prostatic hyperplasia
	Testicular mass	Bladder carcinoma
	Edema	Epididymitis
		Erectile dysfunction
		Glomerulonephritis
		Hydronephrosis
		Hydrocele
		Hypervolemia
		* *
		Hypovolemia
		Nephritis
		Nephrotic syndrome
		Polycystic kidney disease
		Prostate cancer
		Prostatitis
		Pyelonephritis
		Renal calculi
		Renal cell carcinoma
		Renal vascular disease
		Testicular torsion
		Urinary tract infection
		Varicocele
Hematology	Fever	Acute/chronic leukemia
J	Fatigue	Anemia of chronic disease
	Easy bruising	Clotting factor disorders
	Pain	G6PD deficiency anemia Hypercoagulable state
	Bleeding	Idiopathic Thrombocytopenic Purpura
	Arthralgias	Iron deficiency anemia
	Pallor	Lymphoma
	Petechiae	Multiple myeloma
	Blood clot	Sickle cell anemia
	Blood Clot	
		Thalassemia Thrombosis Thrombosis Durnura
		Thrombotic Thrombocytopenic Purpura
		Vitamin B12 and folic acid deficiency anemia
Neurology	Headache	Bell palsy
	Numbness	Cerebral aneurysm
	Paresthesia	Cerebral vascular accident
	Weakness	Cluster headaches
	Facial droop	Coma
	Vertigo	Complex regional pain syndrome
	Balance issues	Concussion
	Fever	Delirium
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	Pain	Dementia
	Pain Confusion	Dementia Encephalitis
	Confusion	Encephalitis

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	Motor or sensory	Guillain-Barré syndrome Huntington disease
	Change in	Intracranial tumors
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	vision/speech	Meningitis
		Migraine headaches
		Multiple sclerosis
		Myasthenia gravis
		Parkinson disease
		Peripheral neuropathies
		Seizure disorder
		Syncope
		Tension headaches
		Transient ischemic attacks
Endocrinology	Fatigue	Acromegaly
	Palpitations	Addison disease
	Weight loss	Cushing disease
	Weight gain	Diabetes insipidus
	Polydipsia	Diabetes mellitus (type I & II)
	Polyuria	Hypercalcemia
	Polyphagia	Hypernatremia
	Heat/cold	Hyperparathyroidism
	intolerance	Hyperthyroidism/thyroiditis Hypocalcemia
	intolcranec	Hyponatremia
		Hypoparathyroidism
		Hypothyroidism
		Paget disease of the bone
		Pheochromocytoma
		Pituitary adenoma
		Thyroid cancer
Infectious Disease	Fever	Botulism
	Chills	Candidiasis
	Rash	Chlamydia
		Cholera
		Cryptococcus
		Cytomegalovirus
		Diphtheria
		Epstein-Barr infection
		Gonococcal infections
		Herpes simplex infection
		Histoplasmosis
		HIV infection
		Influenza
		Lyme disease
		Parasitic infections
		Pertussis
		Pneumocystis
		Rabies
		Rocky Mountain Spotted Fever

		Salmonellosis
		Shigellosis
		Syphilis
		Tetanus
		Toxoplasmosis
		Tuberculosis
		Varicella Zoster
Critical Care	Chest pain	Acute abdomen
	Shortness of	Acute adrenal insufficiency
	breath Confusion	Acute GI bleed
	Pallor	Acute glaucoma
	Unresponsiveness	Acute respiratory distress/ failure
	Abdominal pain	Angina pectoris
	Headache	Cardiac arrest
		Cardiac arrhythmias & blocks
		Cardiac failure
		Cardiac tamponade
		Coma
		Diabetic Ketoacidosis/acute hypoglycemia
		Hypertensive crisis
		Myocardial infarction
		Pericardial effusion
		Pneumothorax
		Pulmonary embolism
		Shock
		Status epilepticus
		Thyroid storm
Ortho/	Arthralgias	Fibromyalgia
Rheumatology	Pain	Gout/pseudogout
	Fatigue	Polyarteritis nodosa
	Fever	Polymyalgia rheumatic
		Polymyositis
		Reactive arthritis
		Reactive arthritis Sjögren syndrome Systemic lupus erythematosus Systemic sclerosis

<sup>\*</sup> Based on PAEA examination

# **RECOMMENDED STUDY RESOURCES**

Note: Although there are no required textbooks for these rotations, students are encouraged to use textbooks and resources that are pertinent to the discipline of their study. The titles below are recommendations provided through Access Medicine.

\*\*Title: <u>Harrison's Principles of Internal Medicine</u>

Author: Jameson et al

Publisher: McGraw-Hill Education / Medical; 20 edition (August 17, 2018)

ISBN-10: 1259644030

ISBN-13: 978-1259644030

\*\*Title: Current Medical Diagnosis & Treatment 2020, Fifty-Ninth Edition

Author: Maxine A. Papadakis, Stephen J. McPhee, Eds. & Michael Rabow, Associate

Editor.

Publisher: McGraw – Hill ISBN: 978--126455281

\*\*Title: <u>Clinician's Pocket Reference</u> Author: Leonard Gomella MD, FACS

Publisher: McGraw-Hill ISBN: 978-00711602822

Recommended downloads for handheld devices:

- Epocrates
- Medscape
- PubSearch
- Medical Calc

NOTE: Individual preceptors may include other resources. You will be notified of these resources by each preceptor. If your preceptor does not offer additional resources, ask them what resources they like to use.

## **HEALTH PROMOTION & DISEASE PREVENTION OBJECTIVES**

- 1. Define primary, secondary and tertiary prevention.
- Identify patients at risk for the diseases listed above and discuss appropriate screening methods.
- 3. Provide patient counseling including education on patients at risk for the chronic conditions listed above to delay disease progression.
- 4. Apply current CDC guidelines for adult immunization.
- 5. Provide patient education of adults and elders relative to the most common injuries and illness in a given age group.

## **ROTATION EVALUATION PROCESS**

Students must maintain a grade of 70% or better throughout the clinical year. A final score below 70% is considered failing. Grades are calculated on a percentage basis. All final course grade percentages are rounded to the nearest number. Rotation assessment grades are based on the following standards:

Rotation Preparatory Exam	20%
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End of Rotation OSCE Skills Exam	30%
End of Rotation Examination	35%
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Preceptor Evaluation	15%
Total	100%

- **A.** Rotation Preparatory Exam: An open source, written assessment used to evaluate the student's current level of knowledge prior to the end of rotation examination. Comprised of multiple-choice questions with content based on the rotation's instructional objectives appropriate, the student is expected to complete the questions with a grade of 85% and submit it at the completion of the rotation.
- **B.** End of Rotation OSCE: This performance-based test is used to objectively measure the student's clinical competence. During the OSCE, students will be observed and evaluated as they address a clinical issue or skill relevant to the student's completed rotation.
- **C.** End of Rotation Examination: A comprehensive written assessment to determine if the student has met the goals and objectives outlined for the clinical rotation.
- **D.** The Preceptor Evaluation of the Student is graded on a Pass/Fail basis and is worth 15% of the course grade. Overall rotation grade at "novice" in any of the main competency areas will result in a failing mark for the Preceptor Evaluation
  - a. Medical Knowledge
  - b. Patient Care
  - c. Interpersonal and Communication Skills

In addition, any student who receives a failing mark for the Preceptor Evaluation will be referred to the SPPC for review:

- **E.** In addition, any of the following may be criteria for failing the rotation:
  - Failure of course components with a grade < 70%
  - Failure to log and submit electronic entries and patient encounters
  - Failure to submit student evaluation of preceptor and clinical site
  - Unacceptable evaluation for professionalism (refer to Clinical Manual)
  - Excessive or unexcused absences from the rotation site (refer to Clinical Manual)

Grading will be in keeping with Point Loma Nazarene University policy for graduate programs and grading will be as follows:

A = 93-100	C =73-76
A-= 92-90	C-=70-72
B+= 87-89	D+=67-69
B = 83-86	D= 63-66

B-= 80-82	D-=60-62
C+=77-79	F= 0-59

#### INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. No partial credit will be given for late assignments. Incompletes will only be assigned under extremely unusual circumstances. Late assignments receiving no credit must still be submitted.

#### REMEDIATION

If a student's final grade falls below the required 70% needed to pass the rotation or the student receives a failing rotation evaluation, the student's case will be referred to the MSM PA Program Student Progress and Promotion (SPPC) Committee. During the Clinical Phase, students have the opportunity to retake a maximum of one (1) failed EOR exam. Due to the unique nature of the clinical year, the dialed exam must be retaken within 7 days of notification of the failed exam. Students have the opportunity to repeat only one (1) failed rotation. The PA SPPC committee will consider requests for remediation plans and/or recycle options and make these recommendations to the full PA program faculty. For further details on this process, please refer to the *PLNU PA Program Student Handbook*.

## **END OF ROTATION STUDENT EVALUATIONS**

All students are expected to complete the evaluations of their preceptor and clinical site the week preceding the completion of their rotations. Failure to submit the evaluation will result in a failing grade for the rotation. These evaluations, which are delivered online, are an important part of rotation assessment and improvement efforts, so your cooperation in completing them is greatly appreciated.

## **PLNU COPYRIGHT POLICY**

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

## PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dis</u>honesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may

assign a failing grade for that assignment or examination, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

#### PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students' equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

ARC-PA standards (4th edition) addressed in this course: B3.02 (preventive, emergent, acute, chronic) B3.03a (adults, elderly), B3.04c (inpatient), B3.07b (IM)

# **SPIRITUAL CARE AND CHAPLAIN SERVICES**

PLNU strives to be a place where you grow as a whole person. To this end we provide resources for our Graduate students to encounter God and grow in their Christian faith. We have an onsite chaplain, Rev. Gordon Wong, at the Mission Valley (MV) campus to service Graduate students at the Mission Valley and Balboa Campuses. Rev. Gordon Wong is available during class break times across the week. If you have questions for, desire to meet with, or want to share a prayer request with Rev. Wong you can contact him directly at <a href="mailto:mychaplain@pointloma.edu">mychaplain@pointloma.edu</a> or <a href="mailto:gordonwong@pointloma.edu">gordonwong@pointloma.edu</a>. Rev. Wong's cell number is 808-429-1129 if you need a more immediate response.

This syllabus is subject to change. Students are encouraged to check course messages and emails in order to remain current.